

WHAT IS CLAIMED IS:

1. A torque converter being configured to transmit torque using a fluid comprising:
 - a front cover;
 - 5 an impeller being arranged axially opposite said front cover and forming a fluid chamber with said front cover, said impeller having at least thirty-seven impeller blades;
 - a turbine being arranged in said fluid chamber to face said impeller; and
 - 10 a stator being arranged between said impeller and said turbine to redirect flow of the fluid flowing from said turbine to said impeller,
- 10 said impeller, said turbine, and said stator constituting a torus having a flatness ratio being less than 0.8.

2. The torque converter according to claim 1, wherein
the number of said impeller blades is a prime number.

15 3. The torque converter according to claim 2, wherein
said flatness ratio of the torus is less than 0.7.

20 4. The torque converter according to claim 1, wherein
said flatness ratio of the torus is less than 0.7.

5. A torque converter comprising:

- a flexible plate being fixed to an engine crankshaft;
- a front cover being non-rotatably connected to said flexible plate;

an impeller being non-rotatably connected to said front cover, and forming a fluid chamber with said front cover, said impeller having at least thirty-seven impeller blades;

a turbine being disposed axially opposite said impeller in said fluid chamber, and being configured to rotate integrally with an input shaft of a transmission; and

5 a stator being arranged axially between said impeller and said turbine to redirect flow of fluid returning from said turbine to said impeller,

said impeller, said turbine, and said stator constituting a torus having a flatness ratio being less than 0.8.

10 6. The torque converter according to claim 5, wherein
the number of said impeller blades is a prime number.

7. The torque converter according to claim 6, wherein
said flatness ratio of the torus is less than 0.7.

15 8. The torque converter according to claim 7, further comprising,
a lockup device being disposed axially between said front cover and said turbine.

9. The torque converter according to claim 5, wherein
20 said flatness ratio of the torus is less than 0.7.

10. The torque converter according to claim 9, further comprising,
a lockup device being disposed axially between said front cover and said turbine.